

Status of the Claims

1-33. (Canceled)

34. (Original) A method for operating a single channel reformatter ("SCR"), comprising:

specifying a group of source-to-destination links, each said link indicative of a source well from which liquid is removed and indicative of a destination well that receives the removed liquid;

determining a preferred execution order for said source-to-destination links; and
executing said source-to-destination links in said preferred execution order by removing liquid from said indicated source well and delivering it to said indicated destination well for each specified source-to-destination link.

35. (Original) The method of claim 34 wherein said step of executing further comprises:

obtaining spatial coordinates for said source-to-destination links; and
converting said spatial coordinates into actuator control information.

36. (Original) The method of claim 35 wherein said step of executing further comprises actuating positioners within said SCR using said actuator control information.

37. (Original) The method of claim 36 wherein said step of executing further comprises:

positioning an indicated source well at a specified location in an x-y plane by actuating an x-y positioner;
aspirating said liquid from said indicated source well;
positioning an indicated destination well at said specified location in said x-y plane by actuating said x-y positioner; and
dispensing said aspirated liquid into said indicated destination well.

38. (Canceled)

39. (Original) The method of claim 34 wherein said step of determining further comprises sequencing said source-to-destination links such that a destination well of a subsequent source-to-destination link is the closest well to a destination well of a previous source-to-destination link.

40. (Original) The method of claim 34 wherein said step of specifying further comprises forming an array of source-to-destination links, wherein:

said array has a size equal to a number of destination wells in a destination container, and said specified group of source-to-destination links is a subset of said array of source-to-destination links.

41. (Original) The method of claim 40 wherein said step of specifying further comprises activating the source-to-destination links in said array that correspond to said group of source-to-destination links.

42. (Original) The method of claim 41 wherein said step of specifying further comprises, for each activated source-to-destination link:

specifying a row and a column indicative of a position of said indicated source well;

specifying a row and a column indicative of a position of said indicated destination well; and

specifying said determined execution order.

43. (Original) The method of claim 42 wherein said step of specifying further comprises using a graphical interface whereby:

said row and column of said indicated source well is specified via a pictorial representation of a source container; and

said row and column of said indicated destination well is specified via a pictorial representation of said destination container.

44. (New) The method of claim 34 wherein liquid is removed from said indicated source well and delivered to said indicated destination well using a first liquid transfer vehicle, and wherein liquid removal and delivery comprises a liquid transfer operation, and further comprising cleaning said first liquid transfer vehicle with an integrated wash system.

45. (New) The method of claim 44 further comprising driving said liquid transfer operation and said cleaning with a single drive mechanism.

46. (New) The method of claim 44 further comprising readying said integrated wash system for a wash cycle during said liquid transfer operation by:

aspirating cleaning fluid to a second liquid transfer vehicle from a first reservoir;
and

dispensing contaminated cleaning fluid from a third liquid transfer vehicle to a waste location;

wherein said aspirating and dispensing occur as said liquid is dispensed into said indicated destination well.

47. (New) The method of claim 44 further comprising conducting a wash cycle by aspirating cleaning fluid from said second liquid transfer vehicle to said first liquid transfer vehicle.

48. (New) The method of claim 34 wherein said source well is from a plate having a relatively lower-density format and said destination well is from a plate having a relatively higher-density format.

49. (New) A method for operating a single channel reformatter ("SCR"), comprising using a single drive mechanism to conduct a reformatting operation and a washing operation, wherein:

said reformatting operation is conducting by aspirating liquid from a well in a first plate having a first format and dispensing it to a well in a second plate having a second format, wherein said first format is different from said second format, and wherein said liquid is aspirated and dispensed using a liquid transfer vehicle; and

said washing operation is conducted by:

generating a flow of a cleaning fluid to a first station and a flow of contaminated cleaning fluid away from said first station as said liquid is dispensed; and

aspirating said cleaning fluid into said liquid transfer vehicle at said first station.

50. (New) A method for operating a single channel reformatter ("SCR"), comprising:

forming an array of source-to-destination links, wherein said array has a size equal to a number of destination wells in a destination container;

specifying a subset of said array of source-to-destination links, wherein each said link is indicative of a source well from which liquid is to be removed and indicative of a destination well that receives the removed liquid; and

executing said source-to-destination links by removing liquid from said indicated source well and delivering it to said indicated destination well for each specified source-to-destination link.

51. (New) The method of claim 50 further comprising determining a preferred execution order for said source-to-destination links.

52. (New) The method of claim 51 wherein said preferred execution order comprises sequencing said source-to-destination links such that a destination well of a subsequent source-to-destination link is the closest well to a destination well of a previous source-to-destination link.

53. (New) The method of claim 52 wherein links that are sourced from the same source well are executed before executing a link that draws from a different source well, irrespective of the proximity of destination wells.